

Office Action Summary

Application No.

10/669,471

Applicant(s)

YOKOUCHI, KOUJI

Examiner

FRED I. EHICHIOYA

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 7, 2008 has been entered.
2. Claims 1 – 23 are pending in this Office Action.

Response to Arguments

3. Applicant argues:

Romanik does not teach or suggest prioritization of information items and classification based on the hierarchical structure (page 10, paragraph 2).

Examiner respectfully disagrees with the applicant. Witke et al discloses information item specification means for specifying a portion of or all of the information items of the accompanying information to be used for image classification (see page 17, [0303]: *“Both the input data and the end users are characterized, using hierarchical datasets: the software driving/enabling the interfaces for specification are commonly available”*), and for specifying priority among the specified information items (see Fig. 49 and page 21, [0354] – [0356]: *Witke discloses prioritized information and ranked tree nodes which is interpreted as hierarchical structure*).

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1 – 6 and 13 – 20 are rejected under 35 U.S.C. 101 because:

(i) Regarding claim 1, this claim is directed to an image classification apparatus for classifying image data sets; this appear to be software per se. *Applicant discloses on page 8, lines 23 - 25 of the specification that “The means of the image classification apparatus may be provided as procedures of a program for causing a computer to execute the functions of the means”.* One of ordinary skill in the art would have reasonably interprets this image classification apparatus as other than physical articles or objects to act as a hardware component and realize its functionality. When the computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs are not physical “things.” They are neither computer components nor statutory processes, as they are not “acts” being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized (MPEP 2106.01 [R-5] (I)) and therefore non-statutory.

Claims 2 - 6, 19, and 21 – 23 depend from claim 1, recite computing steps, merely descriptive and lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101 and therefore non-statutory.

(ii) Regarding claim 13, this claim is directed to a computer-readable recording medium. *Applicant discloses on page 26, lines 15 - 20 of the specification that "A skilled artisan would know that computer readable media are not limited to any specific type of storage device and may refer to any kind of device, including but not limited to: CD's, floppy disks, RAM's, ROM's, hard disks, magnetic tapes and internet downloads, in which computer instructions can be stored and/or transmitted".* As such, the claim is not limited to useful manufactures within the meaning of 101, and since it's not a process, machine or composition of matter, it's non-statutory; this medium stores a non-functional descriptive material.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994);

Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming

of a general purpose computer.”).

Claims 14 – 18 and 20 depend from claim 1, recite computing steps, merely descriptive and lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101 and therefore non-statutory.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2001/0022624 issued to Tanaka et al., (hereinafter “Tanaka”) in view of U.S. Pub. No. 2004/0059705 issued to Wittke et al., (Hereinafter “Wittke”).

Regarding claims (1, 7 and 13)*¹, Tanaka discloses an image classification apparatus for classifying image data sets added with accompanying information including information items, the image classification apparatus comprising:

accompanying information obtaining means for obtaining the accompanying information from the image data sets (see page 5, [0016]: *a method of obtaining in mage information is disclosed*); and

image classification means for classifying the image data groups having a hierarchical structure of the information items according to the specified

sets into specified priority (see page 7, [0091] and Fig.10: *image classification based on tree structure is disclosed*), wherein the image data sets are stored in a folder associated with information item of the lowest level in the hierarchical structure (see Figs. 8, 10 and page 7, [0085] - [0086] and [0091] - [0092]: *on fig. 8, 002BIRTHDAY is a folder on the lowest level of the hierarchy that stores the image dataset (Dscf0001.jp - Dsc0004.jp) and on fig.10, AperturePriority is a folder on the lowest level of the hierarchy that stores the image dataset (StrobeAuto.jp and StrobeOff.jp).*

Tanaka does not explicitly teach specification of image

Wittke discloses information item specification means for specifying a portion of or all of the information items of the accompanying information to be used for image classification (see page 17, [0303]: *“Both the input data and the end users are characterized, using hierarchical datasets: the software driving/enabling the interfaces for specification are commonly available”*), and for specifying priority among the specified information items (see Fig. 49 and page 21, [0354] – [0356]: *Wittke discloses prioritized information and ranked tree nodes which is interpreted as hierarchical structure*).

It would have been obvious to one of ordinary skills at the data processing art at the time of present invention to combine the cited references, because Wittke's teaching of specification means for specifying priority information would have allowed Tanaka's system to efficiently utilize expertise in the characterization and delivery of essentially topical knowledge while customizing it to specific individuals as suggested by Wittke on page 5, paragraph 75.

**1 in the above claims, claim 1 is an apparatus, claim 7 is a program claim and claim 13 is a computer readable medium claim otherwise they essentially have the same claim limitations and are therefore grouped together under the same rejection.*

7. Claims 2 – 6, 8 – 12 and 14 - 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka in view of Wittke and further in view of U.S. Pub. No. 2003/0018802 issued to Romanik et al., (Hereinafter "Romanik").

Regarding claims 2, 8 and 14, Tanaka and Wittke teach the claimed subject matter as discussed in claims 1, 7 and 13 respectively. Tanaka or Wittke does not explicitly disclose specification means specifies the information items to be used for image classification as claimed.

Romanik discloses the image classification apparatus according to Claim I, wherein the accompanying information includes classification condition information representing a set of the information items to be used for image classification (see page 3, [0026]: *there are many conditions under which image 305 must be put into queue*) and

the information item specification means specifies the information items to be used for image classification according to the classification condition information (see page 2, [0023]: *the image along with an operation to specify additional attributes. These attributes can include, but are not limited to, specifying what forms of processing the client transfer mechanism can apply to the image*).

It would have been obvious to one of ordinary skills at the data processing art at the time of present invention to combine the cited references, because Romanik's teaching of specification information regarding image would have allowed Tanaka and Wittke's system to classify images into different classes. These classes simplify the searching or locating a particular image.

Regarding claims 3, 9 and 15, Tanaka discloses the image classification apparatus according to Claim 2, wherein the accompanying information includes at least one of items comprising time and date of photography, a photography condition, a photography location, a size of an image, the type of a subject, the name of the subject, the number of objects as the subject, an event, and a comment, as the information items thereof (*see Fig. 1 step 16*).

Regarding claims 4, 10 and 16, Tanaka discloses the image classification apparatus according to Claim 1, wherein the accompanying information includes classification condition information representing a combination of the information items to be used for image classification and the priority thereof (see Fig.8: *the image could be classify either by title, white balance or date*), and

the information item specification means specifies the information items to be used for image classification and the priority thereof, according to the classification condition information (see page 8, [0103]: *a priority is disclosed*).

Regarding claims 5, 11 and 17, Tanaka discloses the image classification apparatus according to Claim 4, wherein the accompanying information includes at least one of items comprising time and date of photography, a photography condition, a photography location, a size of an image, the type of a subject, the name of the subject, the number of objects as the subject, an event, and a comment, as the information items thereof (*see Fig. 1 step 16*).

Regarding claims 6, 12 and 18, Tanaka discloses the image classification apparatus according to Claim 1, wherein the accompanying information includes at least one of items comprising time and date of photography, a photography condition, a photography location, a size of an image, the type of a subject, the name of the subject, the number of objects condition, a photography location, a size of an image, the type of a subject, the name of the subject, the number of objects as the subject, an event, and a comment, as the information items thereof (*see Fig. 1 step 16*).

8. Claims 19 – 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka in view of Wittke and further in view of U.S. Patent No.6,012,069 issued to Hiroshi Shibazak (hereinafter "Shibazak").

Regarding claims 19 and 20, Tanaka and Wittke discloses the claimed subject matter as discussed in claims 1 and 13 respectively. Tanaka or Wittke does not explicitly disclose groups having a plurality of layers as claimed.

Shibazak discloses wherein the hierarchical structure of each of the groups has a plurality of layers (see Fig.12),

wherein a lower layer in the hierarchical structure is associated with a group having a lower order of priority Fig.12 and column 14, lines 39 – 40: *“higher priorities are allocated to upper group”; implicitly, lower group/lower layer are associated with the lower priority. See also column 14, lines 65 – 67*); and

wherein an image data set is classified into a group in the lowest layer of the hierarchical structure, the lower layer being a layer corresponding to the information item that has the lowest order of priority among the information items included in the accompanying information (*see column 14, lines 34 – 40 and lines 63 – 64*).

It would have been obvious to one of ordinary skills at the data processing art at the time of present invention to combine the cited references, because Shibazak's teaching of groups having a plurality of layers would have improved Tanaka and Romanik's system by enabling a user to efficiently retrieve an image that meets the user's ambiguous requirements.

Regarding claim 21, Shibazak discloses the image classification apparatus of claim 19, wherein the image classification means automatically creates the groups having the hierarchical structure of the specified information items according to the specified priority (*column 13, lines 11 – 15*).

Regarding claim 22, Shibazak discloses the image classification apparatus of claim 1, wherein the information item is arbitrarily designated by a user (column 1, lines 61 – 65).

Regarding claim 23, Shibazak discloses the image classification apparatus of claim 19, wherein the hierarchical structure has a plurality of layers (Fig. 12 is a hierarchical structure with plurality of layers), and wherein each of the plurality of layers is associated with one specified information item, each of said specified information items being associated with the priority (column 14, lines 34 – 36),

wherein each of the layers of the hierarchical structure is associated with a different priority (Fig. 14 and column 14, lines 49 – 50), and

wherein the image classification means classifies the image data sets into groups based on the priority associated with each of said specified information items (column 14, lines 38 – 40).

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRED I. EHICHIOYA whose telephone number is (571)272-4034. The examiner can normally be reached on M - F 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Fred I. Ehichioya/
Examiner Art Unit 2162